

Continuing Planning Process 2001-2005 for Water Quality Management

November 28, 2001



*Department of Natural Resources
Water Protection & Soil Conservation Division
Water Pollution Control Program
Administration Section*

CPP Public Notice

- **July 6, 2001 to September 7, 2001**
- **It can be downloaded from the department's website @ www.dnr.state.mo.us/wpsc/wpcp**
- **Notice has been mailed to public and private organizations**
- **Send comments to cleanwater@dnr.state.mo.us or address written comments to the department**

CPP Approval

- **Section 303(d) of the CWA requires that an approved CPP be maintained and that the processes specified are followed**
- **Clean Water Commission approval is necessary for the Continuing Planning Process 2001-2005**
- **Missouri's first CPP received approval in 1973 and its second CPP in 1984 from the CWC and EPA**

Section 303(d)



- **The CWA requires that each state submit a CPP from “time to time” to the regional administrator of EPA and that EPA review the state’s CPP for consistency or inconsistency with the CWA**

States may use any format, the minimum requirement is to address the nine elements

CPP Development



- **Each elementResearch compile and analyse various sources of information**
- **Interviews and e-mail exchanges supported the writing and editing process...each element**

CPP Drafts



- Drafts were submitted to staff for editing and comment and
- Staff submitted drafts that were edited for inclusion into the document

CPP Purpose and Future Revisions



- **To describe the informational processes that allow the department to set program planning priorities**
- **Revisions will be made on an annual basis with a complete revision every five years**
- **Addressing comments...**

What is the CPP ?



***It is the Water Quality Management & Planning
Activity of the Water Quality Program
Continuing Planning Process as of
July 2001***

- Water Pollution Control Continuing Planning Processes are dynamic**

On the Department's Web Site

- ...overview of authority, purpose and scope of the document
- ...the table of contents with links to each of three section and the required elements
- ...the water quality chart
- ...an abstract of the essentials for continuous water quality planning
- ...a summary statement preceding each element
- ...inclusion of legal and technical references and web sites
- ...an appendix of charts and maps

CPP

**...with approval of the first CPP in 1973
Missouri's WPCP received National
Pollutant Discharge Elimination
System (NPDES) authority
in 1974 for permitting,
inspection and
enforcement**

Nine Required Elements



Element 1 Process for developing effluent limits and schedules of compliance -

- **Point source dischargers subject to the NPDES permit program must use effective treatment methods**

Nine Required Elements

Element 1 - Process for developing effluent limits and schedules of compliance

- **Specified effluent limitations in state operating permits**
 - technology based limits**
 - water quality based limits**

States are allowed to develop their own numeric criteria for site-specific reasons

Element 1 -con't



- Best Management Practices - under federal guidelines, BMPs also determine effluent limits for permits (stormwater discharge associated with industrial activities)**

Schedules for Compliance - are part of rule changes, minor changes are included during the permitting process and new sources must meet NPDES

Element 1 -con't

Schedules of Compliance -

...are applicable deadlines complying with effluent limitation requirements and are dependent on the type of discharge involved

Element 1 con't



NPDES program regulations control

...industrial

...domestic

**...and publicly owned
treatment works
(POTWs)**

Element 1- Permits

- Oversight provided for by Engineering review of wastewater treatment systems
- Permitting review to determine effluent limits and issuance of general and or site-specific permits
- Planning review of water quality standards criteria, total maximum daily load limits and best management practices

These reviews ensure permits meet effluent limits.

Element 2



The process for incorporating elements of any applicable area-wide waste treatment plans under section 208 and applicable basin plans under section 209 -

Element 2

A thick, horizontal yellow brushstroke underline that starts under the word 'Element' and extends across the width of the slide.

***SECTION 208 - Area-wide waste
treatment management***

SECTION 209 - Applicable Basin Plans

Element 2

Missouri Water Quality Management Plan of 1979 -

Plans were developed to meet municipal and industrial needs for a period of at least 20 years under Section 208 - today Clean Water Section 208 is largely replaced with the Section 201 facility planning effort - grants for construction of treatment works.

Element 2

Section 209 - Basin Planning

...the original basin planning efforts resulted in all dischargers being compiled into basin plans along with the specific effluent discharged and the severity of the pollution

Element 2 con't

In 1979, basin planning focused on Missouri's significant discharges and affected stream reaches.

Today, basin planning information for the water quality for Missouri's streams highlights non-point source problems from pesticides or animal waste and point source problems that could benefit from regionalization of waste treatment collection systems.

Element 3

**The process for developing total
Maximum Daily Loads. TMDLs and
individual water quality based
effluent limitations for
pollutants as required in
section 303(d)**

Element 3



- **TMDLs are written plans established for the impaired waters identified in the 303(d) listing process**
- **The TMDL process begins with the determination of which waters do not meet and/or not expected to meet WQSs after the implementation of technology-based controls**
- **Plans contain quantified limits for point sources of pollution and management best practices for nonpoint sources of pollution**

Element 3



TMDLs and Public Participation

- **TMDL Policy Advisory Committee group serves in an advisory capacity to the department**
- **All TMDLS have a public notice comment period providing 30 days for the public to comment on proposed implementation plans**
- **The department sends public notices on nonpoint source TMDLs to Stream Teams in the affected watershed and all known stake holders**

Element 3



- **The 303(d) listing process is the basis for TMDL development**
- **TMDLs found not to be compliance with WQSs are compiled into a biennial state water quality report every two years called the 305(b) report**
- **TMDLs identify the allowable pollutant load**
 - **sum of waste-load allocations for point sources, load allocations for nonpoint sources, a margin of safety and allowances for future growth**



Element 4

The process for updating and maintaining Water Quality Management Plans, including schedules for revision

Element 4 -



**This focus of this element is on area-
wide waste treatment, basin
planning, financial planning,
watershed planning,
nonpoint source
management
planning,**

Element 4 -



**..... monitoring and assessment,
water quality information systems
planning and outlines of activities as
related to GIS and other planning areas**

Element 4



**Municipal Wastewater Treatment Financing
is a cooperative effort of**

- **Missouri Clean Water Commission**

- **Department of Natural Resources**

**Water Protection & Soil Conservation
Division**

**Missouri Environmental Improvement and
Energy Resources Authority**

- **Designated regional agencies as well as local communities are involved in area-wide waste-treatment management planning for their respective areas and communities**
- **The water program develops its Intended Use Plan, a federal requirement for water quality planning each year - planning for the IUP results in the development and management of the Clean Water State Revolving Funding in effect since 1989**

Element 4 - con't

The IUP contains priority lists of applicants for various loans and grants and assurances mandated by federal rules for operation of these financing tools

...Municipal wastewater treatment and disposal plans are a major element of water quality planning in the state and may be supplemented or revised by the department taking into consideration any state policies for water quality management

Element 4



Water Quality Planning Activities

Monitoring state waterbodies provides the information necessary to maintain Water Quality Standards and criteria

- **Monitoring is continuous, including assessing the extent of the point and nonpoint source pollution involved**

Element 4




Water Quality Planning Activities

**Monitoring has multiple purposes -
characterize aquatic biological communities
habitat, developing TMDLs, assessing
trends, support strategies to return to
compliance**

- Intensive surveys, special studies
cooperating with other agencies, review of
areas of research for understanding NPS
pollution, biological monitoring, fish tissue...**

Element 5



**The process for ensuring
adequate authority for
intergovernmental
cooperation in the
implementation of
the State Water
Quality Management
Management**

Element 5

Authorized Intergovernmental Cooperation

- Continuous planning is specifically authorized under Section 303 of the CWA

- State authorization is found in Missouri Clean Water Law, Chapter 644

Element 5-con't

Water Quality Coordinating Committee

- Facilitates discussions among
public and private associations and
groups**

Collaborative Effort

- Memorandum of Understanding
and Agreement**

Element - 5

Financial Assistance - Missouri communities

- The Department and the Clean Water Commission oversee several types of financial assistance provided to protect and preserve water quality**
- Loans are provided to local communities for sewer systems and grants are provided to urban communities for the construction of storm water facilities**

Element - 5

Financial Assistance

**Municipal Wastewater treatment
financing**

**Animal Wastewater Treatment
Financing**

Cooperative Field Effort - Intragovernmental

Environmental Services Program

**Geological Survey & Resource
Assessment Division**

Environmental Assistance Office

Element 6

**The process for
establishing and assuring
adequate implementation
of new and revised Water
Quality Standards,
including schedules of
compliance under the
Clean Water Act**

Element 6

Water Quality Standards

Infrastructure

- **Designated use(s) of the water**
- **Criteria to support the use(s)**
- **Antidegradation**

Element 6

Water Quality Standards

Antidegradation - policy provides protection for existing water quality

- Built upon EPA requirements**

Variances from standards -

Time limited with assurances that standards will be attained

Element 6

Water Quality Standards

Include -

- Narrative criteria**
- Numeric criteria**
- Biological criteria**

Section 303 of the Clean Water Act includes the requirement that Water Quality Standards be reviewed once for each three-year period.

Element 6 - Con't

Public Involvement

Review Process

Advisory Committee is convened

- **examines the proposed changes**
- **EPA representatives**
- **Missouri Departments of Health, Conservation, Agriculture and Transportation**
- **State's mining, manufacturing and agriculture interests**
- **Municipalities**
- **Environmental interests**

Element 6

**In addition to discussion of
proposed changes and
development of the issues and
consensus if possible...**

**...process of proposed rule
development**

**...includes the solicitation of
input on existing-use designations
for individual waters**

Element 6

Clean Water Commission

Public Hearing

...of proposed changes

...following public testimony and public comment, the staff summarizes all comments and presents recommendations to the Commission for adoption

...CWC approval or disapproval

Element 7

**The process for assuring
adequate controls over the
deposition of all residual
waste from any water
treatment processing**

Element 7 - con't

Controlling Residual Waste

Sludge

- **Byproduct of the industrial treatment process of raw wastewater and the result of contaminants removed from the water**
- **State operating permits are required**
- **Sludge not used as biosolids may be incinerated**

Element 7

Missouri Biosolids program has been in place since 1982

- **Operates under state rules and the delegated authority of the National Pollution Discharge Elimination System Part 503 standards for sludge**

- **Missouri Department of Natural Resources and the University of Missouri at Columbia Cooperative Extension Services have developed appropriate guidance**

Element 8

**The process for
developing an inventory
and ranking, in order of
priority of needs for
construction of waste
treatment works required
to meet the applicable...**

Element 8

**...requirements of section
301(Effluent Limitations)
and 302(Water Quality
Related Effluent Limits)
under the Clean Water Act**

Element 8

Community Water Quality Needs

**Maintaining identified Public Wastewater
works Construction Needs**

**What is a Need ? A 'cost estimate'
for a project eligible for Clean Water State
Revolving Fund Loans and state grants**

Element 8 - con't

Community Water Quality Needs

- | New project requests for funding from communities are reviewed based on the project's public health or water quality problem**
- | Cost estimates are developed for funding within the scope of SRF capabilities**

Element 8

Community Water Quality Needs

Cooperative financing -

...The Clean Water Commission, the Missouri Department of Natural Resources and the Environmental Improvement and Energy Resources Authority cooperate to maximize the amount of construction supported by State Revolving Fund Loan Programs

Element 8

Community Water Quality Needs

In FY 2002 applications will be required to go through the Missouri Water and Wastewater Review Committee prior to submission to the department's grant and loan programs.

Element 9

The process for determining the priority of permit issuance -

- General and site-specific operating permits are issued for a maximum of five years. Application for renewal must be submitted at least 180 days before the renewal date.**

Element 9 - con't

Timelines for decisions -

- **site-specific permits must be either issued or denied within 180 days of the receipt of an application**
- **the department returns application fees when those deadlines are not met**

Element 9 - con't

Who reviews ?

- **Regional offices review general permit applications pertaining to non-storm related requirements**
- **Site-specific permits are generally reviewed upon application for renewal in the central state office**

Section III

Future Development and Water Quality Impact

**Growth and Development impact water
quality...**



Continued Planning

**Projects involving impaired waters
and projects preventing degradation
of the water to improve or maintain
water quality are highest on the list
of priorities**

Section III

A list of Issues in Water Quality

...Channelization

...Eutrophication

...Mercury Levels in fish

...Abandoned lead-zinc mines

...Additional groundwater protection

...Large concentrated animal feeding operations

...Degraded quality of the aquatic habitat

...Impacts on streams from suburban development

Section III

Future Developments



Summarized in this section are the functions of the administration, planning, permitting, enforcement, finance and engineering sections of the Water Pollution Control Program as well as comments on future developments.

Thank You For Your Participation



*Department of Natural Resources
Division of Environmental Quality
Water Pollution Control Program
Planning Section*